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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,015	03/29/2001	Sandip Sarkar	000388	8358

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QUALCOMM INCORPORATED
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EXAMINER	
LY, ANH VU H	
ART UNIT	**PAPER NUMBER**
2616	

NOTIFICATION DATE	DELIVERY MODE
05/18/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/823,015	SARKAR ET AL.	
	Examiner	Art Unit	
	Anh-Vu H. Ly	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☒ Claim(s) *1* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 13, 2007 has been entered.

Claim Objections

2. Claim 1 is objected to because of the following informalities: in line 1, replace "A transmitter apparatus" with --A transmitter-- or --A transmitting apparatus-- since "transmitter" and "apparatus" are nouns. However, dependent claims 2-5 recite "The transmitter" in line 1; Therefore, it is more appropriate to replace "A transmitter apparatus" recited in line 1 with --A transmitter--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Razoumov et al (US Patent No. 6,771,700 B1).

With respect to claim 1, Razoumov discloses a transmitter apparatus (Fig. 1) comprising:

a processor operative to control transmission and retransmission of data (Fig. 3, processor 308); and

a memory storage device operable for storing a plurality of computer-readable instructions (Fig. 1 illustrates a wireless communication system, represented by a base station 102 and remote station 104, communicating data over forward link 106 and reverse link 108. Herein, the base station 102 and the remote station 104 must include memory for storing instructions to be implemented in controlling data communications), comprising:

a first set of instructions for receiving a transmission frame error rate and a retransmission frame error rate from a receiver (col. 4, lines 30-40 and col. 7, formula 22, instructions for receiving first FER1 and second FER2);

a second set of instructions for determining a transmission energy setpoint as a function of the transmission frame error rate (col. 7, formula 22, E2 is determined according to received f(E1) or FER1. Herein, f(E1) is the transmission frame error rate and E2 is the transmission energy setpoint) and the transmission quality (col. 7, lines 16-20, transmitting station adaptively evaluates feedback information received from the receiving station, e.g., attenuation, fading, number of multi-paths, velocity, and data rate); wherein the determination of the transmission energy setpoint is responsive to an update trigger (col. 7, formula 22, received f(E1) is the update trigger); and

a third set of instructions for determining a retransmission energy setpoint as a function of the retransmission frame error rate (col. 7, formula 22, E3 is calculated as a function of received f(E2). Herein, f(E2) is the retransmission frame error rate and E3 is retransmission energy setpoint) and the retransmission quality (col. 7, lines 16-20, transmitting station adaptively evaluates feedback information received from the receiving station, e.g., attenuation, fading, number of multi-paths, velocity, and data rate), wherein the determination of the retransmission energy setpoint is responsive to the update trigger (col. 7, formula 22, received f(E2) is the update trigger).

With respect to claim 2, Razoumov discloses that wherein the transmission quality is measured by a received error indication signal (col. 3, lines 62-63, the transmitting station is alerted to the occurrence of frame errors at the receiving station).

With respect to claim 3, Razoumov discloses that wherein the transmission energy setpoint and retransmission energy setpoint are determined as traffic to pilot ratios (col. 4, formula 1. Herein, the total transmission energy is a function of traffic to pilot ratio).

With respect to claim 4, Razoumov discloses that wherein the third set of instructions determines retransmission energy setpoint as function of retransmission frame error rate, retransmission quality, and the transmission energy setpoint (col. 7, formula 22 and col. 7, lines 16-20, herein, energy E3 relates to FER2, E1, and channel conditions occur during transmission and retransmissions).

With respect to claim 5, Razoumov disclose that wherein the third set of instructions determines the retransmission energy setpoint by adding a delta value to the transmission energy setpoint (col. 7, formula 22, E3 will equal to a number added to E1 for a fixed E and fixed FER1 and FER2 and E2).

With respect to claim 6, Razoumov discloses a method comprising:

determining a transmission energy setpoint to achieve a transmission frame error rate (col. 4, lines 30-40, the transmitting station selects a second transmission energy (E2) and re-transmits the frames received in error);

adjusting the transmission energy setpoint on occurrence of a transmission error (col. 7, formula 22, energy E2 is adjusted to E3 after received f(E2)), wherein the transmission error is received from a receiver (col. 3, lines 62-63, the transmitting station is alerted to the occurrence of frame errors at the receiving station);

determining a retransmission energy setpoint to achieve a retransmission frame error rate (col. 7, formula 22, E3 is determined upon receiving f(E2)); and

adjusting the retransmission energy setpoint on occurrence of a retransmission error (col. 7, formula 22, energy E3 is adjusted to E4 after received f(E3), not shown), wherein the retransmission error is received from the receiver (col. 3, lines 62-63, the transmitting station is alerted to the occurrence of frame errors at the receiving station).

With respect to claim 7, Razoumov discloses that adjusting the retransmission energy setpoint as a function of transmission energy setpoint (col. 7, formula 22, herein, energy E2, E3, E4, etc... are adjusted based on total energy and previous transmitted energy).

With respect to claim 8, Razoumov discloses that adjusting the retransmission energy setpoint to achieve a desired frame error rate for retransmission (col. 4, formula 2 and col. 7, formula 22 and 23).

With respect to claim 9, Razoumov discloses that adjusting the transmission energy setpoint to achieve a desired frame error rate for transmission (col. 6, formula 21).

With respect to claim 10, Razoumov discloses that wherein the transmission frame error rate is greater than the retransmission frame error rate (col. 6, formula 21, herein, according to the formula, f(E1) is always greater than f(E2) for some numbers).

With respect to claim 11, Razoumov discloses that wherein the transmission frame error rate and retransmission frame error rate result in a desired total frame error rate (col. 4, formula 2).

With respect to claim 12, Razoumov discloses that wherein transmission frame error rate and retransmission frame error rate are predetermined values (col. 4, formula 2).

With respect to claim 13, Razoumov discloses that wherein transmission frame error rate and retransmission frame error rate are dynamic values (col. 4, formula 2).

Response to Arguments

4. Applicant's arguments filed April 13, 2007 have been fully considered but they are not persuasive.

Applicant argues in page 6 that Razoumov does not disclose determining a transmission energy setpoint as a function of the transmission frame error rate and determining a retransmission energy setpoint as a function of the retransmission frame error rate. Examiner respectfully disagrees. Razoumov discloses that the receiving station reports the first FER1 and identity of those frames received in error back to the transmitting station. The transmitting station selects a second transmission energy E2 and re-transmits the frames received in error (col. 4, lines 33-37). Herein, the selected E2 (transmission energy setpoint) corresponds to the FER1 (transmission frame error rate).

Further, Razoumov discloses that although the retransmission method, and its mathematical treatment was simplied for tutorial purposes to one transmission, and one retransmission, the principle is readily extendable to any arbitrary number (N) retransmission (col. 6, lines 62-65). Therefore, according to formula 22 (col. 7, lines 1-3), the energy E3 is set after received FER2. Herein, energy E3 is the retransmission energy setpoint and FER2 is the retransmission frame error rate.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H. Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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